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ABSTRACT

Data from a sample of participants in JTP (Job Training Partnership) Ohio under Title III of the Job Training Partnership Act (JTPA) were analyzed and the findings compared to results from a companion study of Title IIA adult Ohio JTP participants. Respondents were surveyed during the 14th-17th weeks following the end of their JTP participation. Five outcomes were studied: number of weeks worked, employment status, earnings during week 13, welfare status during week 13, and educational status. Among the findings were the following: (1) JTP services received by Title IIA and III participants differed sharply; (2) for outcomes other than earnings, the effects of JTP services were similar for both Title IIA and III participants; (3) ending JTP participation to enter employment increased weeks worked and the chance of working during week 13 and decreased the likelihood of receiving public income assistance; (4) being black had a negative effect on weeks worked and the chance of being employed in week 13; and (5) assessment was an important aspect of increasing earnings for dislocated workers. (The report contains 13 data tables. Two tables showing earning frequencies and seven references are appended.) (YLB)

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ANALYSIS OF THE OHIO THIRTEEN-WEEK FOLLOW-UP SURVEY OF TITLE III JTP CLIENTS

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U.S. DEPARTMENT OF EDUCATION
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FOREWORD

In 1986, the United States Department of Labor (DOL) mandated that the economic status of Job Training Partnership Act (JTPA) clients be determined 13 weeks after completion of a Job Training Partnership (JTP) program. In Ohio, the Ohio Bureau of Employment Services (OBES) is responsible for programs authorized by JTPA. Until now, relatively little information was available to DOL or to OBES as to the long-term effects of participating in a JTP program. To administer successfully the resources provided by JTPA, DOL and OBES must have information on whether or not the JTPA programs are meeting the needs of clients. This report is intended to help fill the need for information. It contains analyses of a sample of Title III JTP Ohio clients who were surveyed 13 weeks after ending their JTP participation. The analysis is focused on identifying effects of JTP services on employment and earnings outcomes.

The study was conducted in the Evaluation and Policy division of the National Center under the direction of N.L. McCaslin, Associate Director. Dr. Lawrence Hotchkiss, Research Specialist, served as project director. We would like to thank Program Associate John Smythe and Dr. Dennis Benson, President of Appropriate Solutions, Inc., for their work in preparing this report. Special thanks are extended to Alice Worrell, Manager of Evaluation Services, Ohio Bureau of Employment Services, for her cooperation and patience as well as the helpful insights she provided.

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Ray D. Ryan
Executive Director
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in Vocational Education

EXECUTIVE SUMMARY

This report analyzes data from a sample of participants in JTP Ohio under title III of the Joint Partnership Training Act. Throughout the report, findings are compared to results from a companion study of title IIA adult Ohio JTP participants.

As anticipated, title III participants (dislocated workers) are older, of higher socioeconomic status, more likely to be parents in a two-parent family, and less likely to be ex-offenders, limited English proficient, or handicapped than title IIA participants. Title III respondents also earn more and are better educated than title IIA participants.

Five outcomes occurring during the first 13 weeks following participation in JTP Ohio programs are examined in the study: (1) number of weeks worked during the 13-week follow-up period after ending JTP services, (2) employment status (working, not working) during week 13 of the follow-up period, (3) earnings during week 13, (4) welfare status during week 13 (received public assistance, did not receive assistance), and (5) education status during the 13-week follow-up (attended school, did not attend school). Relationships between these outcomes and numerous pre-determined variables such as race, gender, and labor market experience are investigated. However, the primary focus of the study is on the effects of JTP training on the outcomes.

Among the predetermined variables, being black has a negative impact on weeks worked and the chance of being employed in week 13. Blacks also are substantially more likely to receive public assistance than whites. The pervasive finding that females earn less than males also is replicated in the title III sample. The effects are fairly large (over $90 a week) but should be interpreted with caution due to the large variation in earnings and the small sample size. Receiving AFDC (Aid to Families with Dependent Children) at the time of application to JTP programs substantially reduces the number of weeks worked during the follow-up period and the likelihood of being employed in week 13, and receiving such assistance increases the chance of receiving public assistance during week 13. Contrary to past findings and the title IIA results, labor market experience has very little influence on the five outcomes specified previously. Education, however, has an extremely strong effect on earnings; college graduates earn over $200 per week more than high school graduates.

The JTP services received by title IIA and title III participants also differ sharply. The three services most often used by title IIA respondents are classroom training, job search, and on the job training (OJT). For title III participants, however, assessment is used about as frequently as classroom training and job search. The addition of "assessment" to the multivariate analyses produced a large positive effect of $187 on weekly earnings. This finding must be interpreted with caution since

there were only 17 respondents who received assessment and who were employed during week 13 of the follow-up period. Seven workers in this group reported weekly earnings of $600 or more, thus possibly creating a disproportionate influence on the earnings outcomes.

For outcomes other than earnings, the effects of JTP services are similar for both title IIA and title III participants (i.e., they improve employment chances and reduce welfare dependency). Due to the much smaller sample, the differences among title III participants are not statistically significant.

Ending JTP participation to enter employment increases weeks worked and the chance of working during week 13 and decreases the likelihood of receiving public income assistance. However, entering employment is generally associated with reduced earnings. Since it is possible for JTP programs to influence whether clients end their participation to enter employment, the positive effects of entering employment on employment outcomes and welfare status are encouraging. If the negative effects of entering employment on earnings are real, as implied by parallel findings reported by Hollenbeck and Bennici (1987), then entering employment is a somewhat mixed blessing. The optimum balance between taking an early job offer during a job search and holding out for a better job is a complex issue that has no easy answer.

Because of the small sample size and high variation of earnings in the title III sample, it is impossible to draw firm inferences from the present study. However, the evidence, on balance, does suggest that assessment is an important aspect of increasing earnings for dislocated workers. The primary avenue for improving other outcomes seems to be helping dislocated workers find jobs (enter employment). This emphasis must be tempered by the possibility that early reemployment may result in lower earnings. A larger sample and longer tracking of respondents than available here is necessary to assess the influence of JTP on dislocated workers.

CHAPTER 1

INTRODUCTION

The Ohio Bureau of Employment Services (OBES) administers many training programs under the auspices of the Job Training Partnership Act (JTPA). This report is part of a sequence of reports designed to provide OBES with detailed data that can be used to help evaluate these training programs. One of these reports has already been submitted to OBES; it is entitled Ohio Thirteen-Week Follow-Up Survey of Title IIA and Title III JTP Clients. That report provides OBES with the data required to complete the Department of Labor's JTPA Annual Status Report. The present report contains analyses of title III clients. In addition, reports containing a SDA summary for title IIA clients, a statewide analysis for title IIA clients, and a report on employers of title IIA JTP Ohio clients are included in the sequence. The employer report includes summaries of employer opinions of JTP Ohio and analyses of the correspondence between employee reports and employer records of employment and earnings information.

Data for these reports are taken from three sources. The primary data source is a follow-up survey of individuals who received training under JTP Ohio training programs. A large sample (N = 4012 completions) of individuals receiving training under title IIA of the act and a small statewide sample (N = 251 completions) of individuals receiving training under title III of the act are included in this survey. The second source of information is a sample of employers of former title IIA JTP Ohio clients. This sample provides data for the employer report. The final source of information comes from OBES's Management Information Systems (MIS). The MIS files were merged with the survey data to produce the data summaries contained in these reports. The present report utilizes data from the client survey and the MIS files.

This report is divided into four chapters. Chapter 2 describes procedures, including sampling; operational definitions; and methods of analysis. Chapter 3 reports the findings, and the final chapter summarizes and evaluates the findings.

CHAPTER 2

PROCEDURES

This chapter is organized into two sections. The first section describes the data. Section two contains operational definitions of the variables.

Data

In determining the title III sample for the state of Ohio, we followed in detail the procedures outlined in the Technical Assistance Guide (TAG) provided by the United States Department of Labor (1986). As prescribed by TAG, the title III sample size was calculated for the state in a manner necessary to ensure a 95 percent confidence level for a proportion equal to 1/2 in the population. Once the proper sample size was determined, it was then multiplied by a factor of 1.1 to obtain an oversample. There are two reasons for oversampling. First, by oversampling, we avoided sampling bias problems that can be caused by changing sampling proportions which might be needed in case of inaccurate SDA estimates of the number of terminees. Second, the oversample was used to provide a backup pool of cases from which to draw replacements in the event those in the primary sample were dropped due to disability or death.

As with the title IIA sample, respondents were surveyed during the 14th-17th weeks following the end of their participation in JTP Ohio training.[1] Data collection was carried out by Appropriate Solutions, Inc., (ASI) under subcontract to the National Center.

The first step in the data collection was an attempt to complete each interview by telephone. The telephone interview followed in detail the DOL requirements as described in TAG. If, after 2 weeks, the interviewer was unable to interview the terminee successfully by phone, a mail version of the terminee questionnaire was sent. Five days after the mail survey was sent, a combination thank-you and reminder letter was mailed to the terminee. If, after an additional 5 days, the survey was not returned, then a second mail survey was sent. If the second mail survey was not returned, and the terminee was still not successfully interviewed by telephone, then his or her file was classified as incomplete.

Included in the mailed literature and in all the telephone messages left for the terminee was the 800 telephone number for

[1] In some cases the interview window was extended to 5 weeks--if the individuals were located during the 4-week window but were not available to be interviewed for reasons such as vacation or illness.

ASI's survey center. This number was left with instructions to encourage terminees to call in to complete their interviews. The "call-in" method of data acquisition proved highly successful; it accounted for about 25 percent of the interviews. Call-ins were far more successful than self-administered mailed questionnaires in obtaining information from respondents who could not be interviewed by the initial telephone attempts.

Data describing services received from JTP programs, personal characteristics, education, and work history prior to participation in JTP Ohio were taken from the state MIS system. These were merged with the survey data by matching social security numbers.

Variables

This section contains the definitions of all the variables used in the report. For each nominal variable (such as gender), there are J-1 dummy variables included, where J is the number of categories in the nominal variable. The follow-up data are taken from the survey described above. The other variables were defined from the Ohio Bureau of Employment Services MIS system. The source of data used to define each variable is included with the definition.

- Age--Two dummy variables describing age are included (source--MIS):

  --Ages 30-54 (yes, no)
  --Ages 55+ (yes, no)

- Gender--(Source--MIS):

  --Male (1) (yes, no)

- Race--Two dummy variables indicating race are used.

  --Black (yes, no)
  --Other--This group includes Hispanics, Asians, and Others. (yes, no)

- Welfare status at follow-up--This variable indicates whether or not an individual received public assistance at follow-up. (source--survey) (yes, no)

- Education status at follow-up--This variable indicates whether or not an individual attended school during the 13-week follow-up period. (source--survey, q. 4) (yes, no)

- Types of services--These variables specify the types of services the JTP client received. Four types of services are used (source--MIS transaction records):

  --On the job training/No on the job training (yes, no)
  --Job search/No job search (yes, no)
  --Classroom training/No classroom training
  --Assessment

- Reason for ending training--These variables specify why a JTP client left a JTP training program (source--MIS):

  --Entered employment A01-A05 (yes, no)
  --Exceeded program duration C12 (yes, no)
  --Exceeded 90 day hold status C14 (yes, no)
  --Poor attendance (C06,C07) (yes, no)

- Education status at application--these variables specify the highest level of education the JTP client received (source--MIS):

  --Grades < 12-------high school dropout
  --Grade 13,14,15----some college (yes, no)
  --16+ --------------college graduate (yes, no)

- Family status--These variables specify the position of the individual within his/her household (source--MIS):

  --Single parent with ≥ one child under 6 years old or less (yes, no)
  --Single parent with ≥ one child 6-17 years old (yes, no)
  --Parent in two parent home (yes, no)
  --Other family member (yes, no)

- Welfare status at application--These variables specify the different types of welfare the client may receive (source--MIS):

  --AFDC (yes, no)
  --General (yes, no)

- Employment at week 13 (source--survey) (not employed = 0, employed = 1)

- Earnings in week 13 in dollars (set to missing if not employed; source--survey)

- Weeks worked during the 13-week follow-up (source--survey)

- Welfare status at week 13 (source--survey):(1 = received AFDC, general, or refugee assistance, 0 = received no assistance)

- Received layoff notice at application (source--MIS): (yes, no) (1 = not working)

- Not employed at application (source--MIS):(1 = not employed, 0 = employed)

- Date last worked at application--This was converted to single decimal number. Units are years. (source--MIS)

- Wage of last/current job at application (source--MIS)

- Hours of last/current job at application (source--MIS)

- Family income at application--This variable converted to logarithms to reduce skew. (source--MIS)

- Weeks worked in year prior to application (source--MIS)

- Labor market experience--This was defined as age-date last enrolled in school. (source--survey)

All statewide statistical summaries contained in this report were calculated using sample weights. Sample weights were used to correct for the difference in response rates between those employed and those not employed at termination. The weights are designed to prevent persons employed at termination from being overrepresented in statistical calculations. The formula used to calculate the weight is P_j/p_j for those employed at termination and $(1-P_j)/(1-p_j)$ for those not employed. P_j stands for the proportion employed at termination in the population, and p_j is the corresponding proportion for completers.

CHAPTER 3

FINDINGS

The findings of this report parallel those in the companion report for title IIA respondents (Hotchkiss and Smythe 1988). No SDA analyses similar to those done in the title IIA report are included in the present report, and other analyses are simplified in comparison. The same five outcomes studied in the title IIA reports are examined here; these outcomes are as follows:

- Weeks worked during the 13-week follow-up period
- Employment status (employed, not employed) during week 13 of the follow-up period
- Earnings during week 13 of the follow-up period (for those who worked)
- Welfare recipient (yes, no) during week 13
- Education status during the 13-week follow-up (attended school during period, did not attend)

Relationships between these variables and several potential determinants of them are studied. Basic cross tabulations paralleling those presented in the title IIA report are examined first, then multivariate analyses are presented. Due to the small sample size for the title III study, special care must be exercised with the multivariate analyses. Two strategies are pursued. First, the list of independent variables used in the title IIA report was trimmed, thus conserving degrees of freedom. Second, careful comparison of title III results to title IIA results are included. These comparisons include statistical tests of the hypothesis that the effects of all variables do not differ by title.

The chapter is divided into three sections. The first section reports basic descriptive statistics. Section two reports simple relationships in cross-tabular format. Section three presents findings using multivariate methods.

Descriptive Data

Table 1 contains the mean, the standard deviation, and the number of cases for each variable used in this report. For variables derived from the state MIS system, the sample size is the number of clients drawn in the sample who received services through SDAs. The sample size of variables defined from the survey are the number of completions with nonmissing data for the variables. In the case of earnings, the sample size is the number who worked in week 13 who reported their earnings. The nominal-scale variables such as the reason for termination are split into

TABLE 1

MEANS AND STANDARD DEVIATIONS

Variable	Variable Code Name	Mean	Standard Deviation	Sample Size
Employed at Termination	EMPLTERM	64.529	47.919	315
Employed at Follow-Up	EMPLFLUP	72.553	44.714	251
Average Pay in Week 13	PAYWK13	324.364	188.988	169
Average Number of Weeks Worked	WEEKSWRK	9.467	5.206	251
Education Status at Follow-Up	ATNDSCHL	8.286	27.623	250
Labor Market Experience	LMEXPER	12.409	9.598	315
Number of Weeks Worked in Year Prior to Application	WKSWRK1	26.981	19.968	315
Welfare Status at Termination	WELSTA2	9.386	29.222	251
Sex	SEX	76.443	42.503	315
Black	BLACK	12.736	33.391	315
Other Race	OTHRRACE	5.623	23.073	315
AFDC Recipient at Application	AFDCAPL	8.074	27.288	315
General Recipient at Application	GENRLAPL	5.106	22.048	315
Exceeded Program Duration	TOOLONG	.608	7.787	315
Exceeded 90 Day Hold Status	EXHOLD	4.054	19.754	315
Age 30 to 54	AGE3054	63.226	48.323	195
Age 55+	AGE55PL	4.174	20.042	195
High School Dropout	DROPOUT	13.559	34.309	195
Some College	SMCOL	26.377	44.163	195
College Graduate	COLGRAD	10.423	30.621	195
Job Search	JBSRCH	23.364	42.406	195
Classroom Training	OCC_CLAS	32.846	47.066	195
On the Job Training	OJT	36.577	48.268	195
Assessment	ASSESS	17.215	37.849	195
Not Employed at Termination	NOTEMPL	83.506	37.193	194
Single Parent with $\geq$ 1 Child Ages 1 to 6	SP1_6	3.285	17.862	195
Two-Parent Home	TWOPAR	51.940	50.070	195
Other Family Member	OTHFAMM	11.509	31.982	195
Single Parent with $\geq$ 1 Child Ages 7 to 17	SP6_17	5.260	22.371	195

J-1 binary variables, where J = number of categories in the variable. The binary variables were coded 0 for absent and 100 for present. Their average, therefore, is the percentage in the category. The omitted category for each nominal variables is the category omitted from the regressions in order to avoid multicollinearity.

It is instructive to compare the means in table 1 to corresponding means for title IIA respondents. The socioeconomic (SES) profile of title III respondents is substantially higher than the title IIA profile. Average earnings is higher by nearly 60 percent. The percentage of title III respondents who did not complete high school is approximately one-half the percentage of title IIA respondents who did not finish (13.56 percent vs. 27.91 percent). The percentage of title III clients who graduated from college is 10.42, compared to 2.83 percent of title IIA respondents. The percentage of title III respondents receiving public assistance also is substantially less than for title IIA respondents.

The demographic profile of title III respondents also differs markedly from the profile of title IIA respondents. Title III respondents are older, have correspondingly more years of labor market experience, and are much more likely to be parents in a two-parent family than title IIA respondents.

Basic Cross Tabulations

This section reviews basic cross tabulations showing the relationships between the outcomes and several independent variables. With one exception, these are bivariate relationships and therefore are not indicators of net effects. Table 3 does present simultaneous three-way cross classifications by age, race, and gender. Since no other variables affect race, age, and gender, the results in table 3 could be viewed as rough estimates of total effects, except that many of its cells are empty or nearly empty.

Table 2 reports bivariate relationships between race and the five outcomes, gender and the five outcomes, and age and the five outcomes; the simultaneous cross classifications, as noted above, are presented in table 3. The cell sizes in table 3 generally are too small to support firm conclusions. Even in table 2 cell sizes tend to be small, but some relationships in table 2 stand out. Most of the statistically significant differences occur among the three categories of race. Blacks work fewer weeks, are much less likely to be employed, and are more likely to receive public assistance than are whites. Although substantial differences in average earnings occur among races and between females and males, none of these differences are statistically significant. Two factors combine to explain the absence of statistically significant earnings differences. First, there is high variation among individuals on earnings (standard deviation = $188). Second, the sample size is small--(smaller than for any other variable). For a sample size of 2,400 (about the number for earnings in the title IIA sample), all earnings differences in table 2 would be highly significant. Given the pervasive evidence of age, race, and gender earnings differences (Treiman and Hartman 1981; Mincer 1974; Corcoran and Duncan 1978; Coleman et al. 1972), it is unlikely that those differences for title III participants are really zero in the population.

TABLE 2

MEANS/PERCENTAGES FOR FIVE VARIABLES
BY AGE, BY RACE, AND BY GENDER:
BIVARIATE RELATIONSHIPS

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	9.43	9.78	10.40	9.96	6.05	10.60***	9.49	9.40
Employment Rate at Follow-Up	74.44	74.56	70.26	77.28	38.23	88.15****	72.68	72.20
Average Weekly Earnings at Follow-Up	281.42	348.44	392.18	325.41	246.30	402.92	338.25	284.92
Welfare Status at Follow-Up, Percentage of Individuals on Welfare at Follow-Up	12.63	9.48	6.96	7.22	21.67	11.85*	9.88	7.98
Education Status at Follow-Up, Percentage of Individuals Receiving Education at Follow-Up	11.86	4.99	0	7.18	9.38	23.70	7.27	11.14
Response Rate	76.56	83.61	88.89	80.00	84.44	60.00	77.22	87.18
Sample Size	64	122	9	255	45	15	237	78

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 3

MEANS/PERCENTAGES FOR FIVE VARIABLES
BY RACE, GENDER, AND AGE: MULTI-
VARIATE CROSS CLASSIFICATION

	White						Black						Other					
	Male			Female			Male			Female			Male			Female		
	Age			Age			Age			Age			Age			Age		
Variables	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked During Follow-up	9.25	10.33	11.18	11.15	11.21	0	0	6.62	--	9.00	4.72	--	5.50	11.47	--	--	13.00	--
Employment Rate at Follow-up	75.44	80.32	75.51	87.06	86.21	0	0	34.25	--	0	36.75	--	50.00	100.00	--	--	100.00	--
Average Weekly Earnings at Follow-up	307.63	374.35	392.18	211.27	306.00	--	--	226.00	--	--	97.40	--	360.00	247.86	--	--	595.00	--
Welfare Status at Follow-up, Percentage of Individuals on Welfare at Follow-up	12.06	6.80	7.48	8.62	0	0	0	26.48	--	0	34.94	--	50.00	0	--	--	0	--
Education Status at Follow-up, Percentage of Individuals Receiving Education at Follow-up	14.10	3.55	0	0	7.84	0	0	0	--	0	6.62	--	50.00	0	--	--	33.33	--
Response Rate	76.19	80.82	87.50	92.86	78.95	100.00	33.33	84.62	--	100.00	100.00	--	50.00	100.00	--	--	100.00	--
Sample Size	42	73	8	14	19	1	3	13	0	1	10	0	4	4	0	0	3	0

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

Keeping in mind that the earnings averages reported in table 2 are not precise, it is interesting to note that the same race and gender patterns observed for title IIA respondents and in other data also occur for title III respondents. Females earn less than males, by an average of $53 per week. This difference is close to the gender difference on earnings for title IIA respondents ($52). Blacks earn less than whites--$79 a week less--and less than members of other races--$157 less. These differences are much larger than the corresponding differences among title IIA respondents. Earnings differences by age among title III respondents also are different than the age-earnings profile for title IIA. Earnings increase monotonically by age for title III respondents, but increase from the youngest to middle age group and decline again in the oldest age group of title IIA respondents.

Table 4 reports bivariate associations between the five outcomes and four types of JTP services. In the title IIA report, only three types of services were analyzed--classroom training, job search, and OJT. These are the three most common types of services for title IIA participants. Also, the mean earnings for the omitted types of services are not extreme values for title IIA respondents. In contrast, assessment is used by title III participants about as frequently as classroom training and job search. Moreover, the mean earnings during week 13 of those engaging in assessment is so high ($515/week) that omitting assessment from the regressions dramatically skewed effect estimates of the other types of services downward (see next section). The differences between the means or percentages of those who did and did not engage in assessment are sensible. Those receiving assessment worked more weeks and were less likely to receive public assistance at follow-up than those who did not receive assessment. The weeks worked and earnings differences are highly statistically significant.

Except for assessment, many of the observed differences in table 4 are in the "wrong direction," in the sense that the intention of the JTP service is to increase employment, increase pay, and reduce reliance on public assistance. However, those receiving classroom training work less and earn less than those not receiving classroom training. For weeks worked the difference between those who receive and do not receive such training is statistically significant. Those receiving job search assistance work less, and are more likely to be on welfare, but neither of these differences is statistically significant. Those engaging in OJT earn less than those who do not; the difference is statistically significant. Of course, similar "reverse-direction" relationships were observed in the bivariate tables for title IIA respondents, particularly for classroom training. For title IIA, the reverse-direction differences of classroom training all changed sign after control variables were included. It therefore will be interesting to observe what happens in the multivariate analyses discussed in the next section of this report.

The relationships between the five outcomes and reasons for termination are shown in table 5. Those who entered employment clearly do better than those who left JTP for any other reason. They work more during the 13-week follow-up, are much more likely

TABLE 4

MEANS/PERCENTAGES FOR FIVE OUTCOMES
BY FOUR TYPES OF JTP SERVICES

Variables	Types of Services: Classroom Training		Job Search		OJT		Assessment	
	Yes	No	Yes	No	Yes	No	Yes	No
Average Number of Weeks Worked During Follow-Up	8.15	10.51**	10.38	9.51	10.04	9.50	11.50	9.38****
Average Number of Weeks Follow-Up	68.40	77.40	77.42	73.44	73.05	75.09	83.17	72.71
Average Weekly Income at Follow-Up	286.47	349.43	341.06	326.14	272.37	363.42*	515.35	290.88****
Welfare Status at Follow-Up, Percentage of Terminees on Welfare	10.21	10.41	6.39	11.46	13.48	8.43	4.89	11.33
Education Status at Follow-Up, Percentage of Terminees Receiving Education	11.44	4.50	0	8.88	7.89	6.30	4.89	7.26
Response Rate	85.71	79.20	79.55	82.11	81.69	81.45	72.41	83.13
Sample Size	70	125	44	151	71	124	29	166

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 5

MEANS/PERCENTAGES FOR FIVE VARIABLES
BY REASON FOR TERMINATION

Variables	Reason for Termination: Entered Employment A01-A05	Exceeded Program C-12	Exceeded 90-Day Hold C-14	Poor Attendance C06, C07	Other
Average Number of Weeks Worked During Follow-Up	10.89	6.50	3.19	0	7.50****
Employment Rate at Follow-Up	81.58	50.00	43.75	0	59.13****
Average Weekly Income at Follow-Up	332.89	250.00	251.86	--	306.40
Welfare Status at Follow-Up, Percentage of Terminees on Welfare	7.02	50.00	12.50	75.00	11.30**
Education Status at Follow-Up, Percentage of Terminees Receiving Education	5.31	0	18.75	0	13.91
Response Rate	81.43	66.67	80.00	57.14	79.31
Sample Size	140	3	20	7	145

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

2.3

to be employed during the 13th week, and are less likely to be on welfare. All these differences are statistically significant. Those in the sample who were employed in week 13 and who entered employment also earn more than those who did not enter employment, but the differences are not statistically significant. Again, the reasons probably are that the sample size is small and the variation in earnings large. However, it should be noted that the bivariate relationship between earnings and reason for termination is not significant for title IIA respondents either. Only the adjusted earnings differences are statistically significant for title IIA.

Table 6 reports the associations between the five outcomes and employment at the time of application to JTP. Table 7 shows the relationships between the five outcomes and education. Table 8 reports the relationships with welfare status, and table 9 shows the relationships with family status.[2] There are no statistically significant relationships between employment status and the five outcomes, and the sample differences are small.[3] In contrast, education has a large association with earnings, though it has little relationship to the other outcomes. The relationship between education and earnings here appears to be much stronger than for title IIA. Furthermore, it is monotonic--each higher level of education is associated with higher average earnings than lower levels of education. Among title IIA respondents, college graduates earn less than those with some college and less than high school graduates.

Welfare status at application has a statistically significant association with weeks worked, employment in week 13, and welfare status at follow-up. Those not receiving AFDC or general assistance at application work more weeks than those who are receiving such aid and are also substantially more likely to be employed in week 13. As one would expect, those not receiving public assistance at application are less likely to receive some type of public assistance at follow-up. The percentages of AFDC recipients at application who received either AFDC, or general, assistance at follow-up is particularly high compared to the other two categories of welfare status at application (note small n's, however).

Family status at application shows small-to-moderate relationships with the five outcomes. Only the relationship to welfare status at follow-up is statistically significant. Single parents with children are particularly likely to receive welfare benefits in week 13 of the follow-up period.

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[2] There were so few cases of title III individuals with employment barriers (2 offenders, 5 handicapped, and 1 LEP) that the tabulation is not reported here, even though it is included in the title IIA report.)

[3] Unemployed and not in the labor force were combined into 1 category--not employed. Only one title III respondent was not in the labor force.

TABLE 6

MEANS/PERCENTAGES FOR FIVE OUTCOMES BY EMPLOYMENT STATUS AT APPLICATION

Variables	Employment Status at Application: Employed	Not Employed
Average Number of Weeks Worked During Follow-Up	11.09	9.48
Employment Rate at Follow-Up	85.29	72.51
Average Weekly Earnings at Follow-Up	350.31	325.57
Welfare Status at Follow-Up, Percentage of Terminees Receiving Education	0	12.04
Education Status at Follow-Up, Percentage Terminees Receiving Education	4.69	7.26
Response Rate	70.00	84.15
Sample Size	30	164

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 7

MEANS/PERCENTAGES OF FIVE OUTCOMES BY EDUCATION STATUS AT APPLICATION

Education Status at Termination

Variables	Drop Out	H.S. Graduate	Some College	College Grad.
Average Number of Weeks Worked During Follow-Up	9.49	9.44	9.44	12.11
Employment Rate at Follow-Up	65.64	71.92	77.37	93.17
Average Weekly Income at Follow-Up	244.55	287.81	331.59	593.33****
Welfare Status at Follow-Up, Percentage of Terminees on Welfare	17.18	11.26	8.47	0
Education Status at Follow-Up, Percentage of Terminees Receiving Education	11.93	3.07	12.57	11.18
Response Rate	70.37	83.78	84.62	77.78
Sample Size	27	111	39	18

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 8

MEANS/PERCENTAGES FOR FIVE VARIABLES
BY WELFARE STATUS AT APPLICATION

Variables	Welfare Status of Time of Application: AFDC Recipient	General	Not Welfare
Average Number of Weeks Worked During Follow-up	5.90	8.74	9.87**
Employment Rate at Follow-up	50.39	54.65	75.71*
Average Weekly Income at Follow-up	245.62	161.50	335.47
Welfare Status at Follow-up Percentage of Terminees on Welfare	46.03	12.02	5.47****
Education Status at Follow-up Percentage of Terminees Receiving Education	12.79	15.82	7.51
Response Rate	86.36	69.23	79.64
Sample Size	22	13	280

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 9

MEANS/PERCENTAGES OF FIVE VARIABLES
BY FAMILY STATUS AT APPLICATION

Variables	Family Status at Time of Application: Single Parent With ≥1 Child Under 6 yrs	Single Parent With ≥ 1 Child 7-17 yrs	Parent in 2 Parent Home	Other Family Member	Non Dependent
Average Number of Weeks Worked During Follow-Up	8.26	6.12	10.28	10.18	9.22
Employment Rate at Follow-Up	66.67	48.60	79.58	83.42	65.56
Average Weekly Income at Follow-Up	254.90	287.12	351.83	320.08	296.87
Welfare Status at Follow-Up Percentage of Terminees on Welfare	33.33	45.19	11.10	2.64	2.53****
Education Status at Follow-Up Percentage of Terminees Receiving Education	0	6.21	7.61	0	9.84
Response Rate	85.71	84.62	82.47	90.91	75.00
Sample Size	7	13	97	22	56

NOTES: All values except response rates are weighted to compensate for differential response rate by employment status at application.

Statistical significance refers to the null hypothesis that all means/percentages for a given outcome are equal over all categories of the independent variables (age, race, gender).

Sample sizes are number drawn in sample, not number of completions. To calculate number of completions, multiply sample sizes by response rates.

* $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

Multivariate Analyses

This section reports results of regression analyses in which the five outcomes examined in the preceding section are the dependent variables. The basic model underlying the regressions is taken from the title IIA report. This model is reproduced below as figure 1.

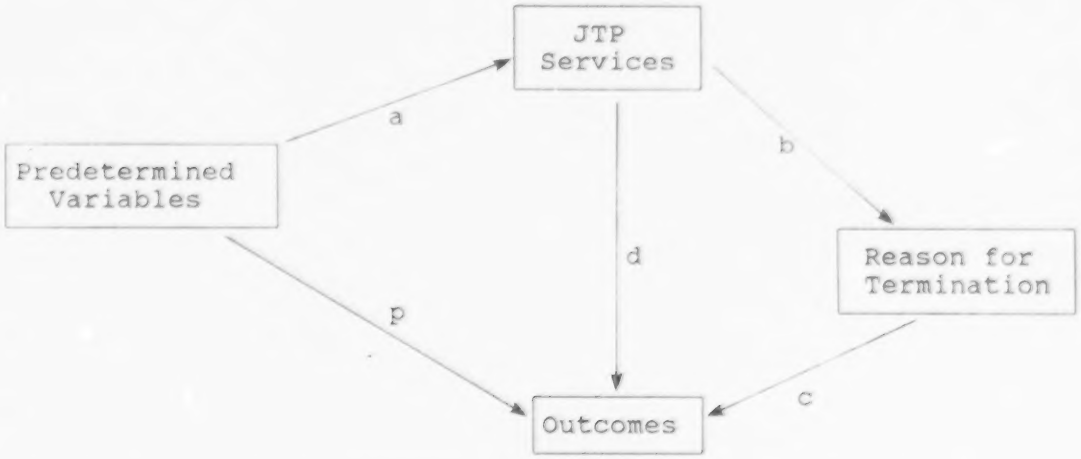

Figure 1. Model of effects of JTP services and reason for termination.

Some important ideas can easily be expressed by reference to figure 1. If JTP programs operate as intended, direct effects of services (d) and reason for termination (c) should be strongly positive, and effects of the predetermined variables (p) relatively weak. Also, the indirect route from services to the outcomes operating through reason for termination (bc), if strong and positive, would be consistent with effective JTP programs.

Due to the small sample size, the list of independent variables used in the title IIA report was trimmed. Variables retained in the title III regressions include all independent variables that are of primary interest to OBES which had sufficient variation to permit inclusion. Additionally, the JTP service called assessment (code = I) was included. These variables are those presented as independent variables in the tabulations in the previous section of this chapter. In addition, labor market experience and weeks worked during the year prior to application are included. Barriers to employment are the only key variables that had insufficient variation to include. The complete list of variables used in the regressions follows:

- Dependent variables

  --Weeks worked during 13-week follow-up
  --Employment during week 13 (yes, no)
  --Earnings during week 13 (for those who worked)
  --Welfare status during week 13 (received benefits, did not receive benefits)
  --Education status during the 13-week follow-up (attended school, did not attend school)

- Reason for termination

  --Entered employment
  --Exceeded program duration
  --Exceeded 90-day hold status

- JTP services

  --Classroom training
  --OJT
  --Job search
  --Assessment

- Predetermined variables

  --Not employed at time of application (either unemployed or not in labor force--N's too small to keep separate)
  --High school dropout (yes, no)
  --Some college (highest level of education completed--yes, no)
  --College graduate (yes, no)
  --AFDC recipient at time of application (yes, no)
  --General assistance at time of application (yes, no)
  --Single parent with children under 6 (yes, no)
  --Single parent with children ages 6-17 (yes, no)
  --Parent in 2-parent family (yes, no)
  --Other family member (yes, no)
  --Gender (male = 1, female = 0)
  --Black (yes, no)
  --Other race (not black and not white = yes, no)
  --Age 30-54 (yes, no)
  --Age 55 & Older (yes, no)
  --Weeks worked in year prior to application
  --Labor market experience (years)

A numeric value of 1.0 was assigned to the "yes" categories and 0.0 to the "no" categories.

The results of the regressions are presented in condensed format in tables 10 and 11, rather than as adjusted means as in

TABLE 10

REGRESSION ESTIMATES OF EFFECTS FOR FIVE OUTCOMES: EXCLUDE ASSESSMENT

Dependent Variable

Independent Variable		Weeks Worked	Empld Wk 13	Earnings Wk 13	Welf Status Wk 13	Ed Status
Entered employment	dir eff	7.39****	0.495****	- 39.50	0.193**	-0.085
Exceeded program (C14)	dir eff	3.59	0.203	-171.10	0.129	-0.122
Exceeded 90-day hold (C14)	dir eff	0.51	0.213	- 85.65	-0.208	0.053
Classroom training	tot eff	-2.36*	-0.112	-111.55**	0.018	0.078
	dir eff	-1.22	-0.046	-109.26*	0.000	0.061
OJT	tot eff	0.92	0.034	- 96.01*	-0.003	0.010
	dir eff	0.92	0.044	- 98.03*	-0.012	0.013
Job search	tot eff	0.09	0.009	- 80.17	-0.022	-0.025
	dir eff	0.20	0.024	- 76.43	-0.039	-0.022
Not empld at application	tot eff	-0.25	0.027	- 38.16	0.001	0.035
	dir eff	-0.05	0.042	- 34.39	-0.008	0.033
HS drop out	tot eff	-0.19	-0.099	- 98.70	0.002	0.066
	dir eff	-0.30	-0.117	- 98.69	0.021	0.062
Some college	tot eff	-0.49	0.044	- 3.94	0.005	0.076
	dir eff	-0.59	0.039	- 5.97	0.005	0.078
College graduate	tot eff	1.68	0.093	202.58****	0.032	0.002
	dir eff	1.46	0.081	257.69****	0.035	0.006
AFDC at application	tot eff	-4.03**	-0.264*	- 47.10	0.293***	0.031
	dir eff	-4.51***	-0.276*	- 56.08	0.287***	0.042
General welfare at application	tot eff	2.16	0.242	- 19.65	-0.136	0.254*
	dir eff	1.87	0.238	- 21.13	-0.156	0.266*
Single par, child under 6	tot eff	-0.40	0.087	85.60	0.257	-0.083
	dir eff	0.79	0.163	72.45	0.225	-0.096
Single par, child 6-17	tot eff	-1.89	-0.059	27.23	0.402***	-0.010
	dir eff	0.10	0.062	21.47	0.350**	-0.032
Par. in 2-par family	tot eff	1.05	0.125	63.22	0.110	0.024
	dir eff	1.01	0.121	63.32	0.108	0.026
Other family member	tot eff	1.17	0.235	55.02	0.052	-0.024
	dir eff	1.06	0.230	50.66	0.049	-0.021
Gender (1=male)	tot eff	-1.55	-0.074	84.10	0.079	-0.034
	dir eff	-1.49	-0.078	87.25*	0.084	-0.037
Black	tot eff	-4.55***	-0.490****	-72.37	0.225**	-0.105
	dir eff	-4.06***	-0.460****	-76.77	0.213**	-0.110
Other race	tot eff	1.00	0.166	88.45	-0.072	0.092
	dir eff	0.14	0.109	92.56	-0.051	0.103
Age 30-54	tot eff	0.64	0.007	15.70	-0.070	-0.040
	dir eff	0.75	0.005	18.30	-0.062	-0.044
Age 55 & older	tot eff	-0.14	-0.234	51.01	0.050	0.016
	dir eff	0.92	-0.213	56.76	0.084	0.015

Table 10--Continued

Independent Variable		Dependent Variable: Weeks Worked	Empld Wk 13	Earnings Wk 13	Welf Status Wk 13	Ed Status
Weeks wkd prior to appl.	tot eff	0.02	0.001	- 0.34	-0.003*	0.000
	dir eff	0.00	0.000	- 0.31	-0.003*	0.001
Labor mkt. experience	tot eff	0.04	0.003	2.29	-0.002	-0.004
	dir eff	0.01	0.002	2.18	-0.002	-0.003
Intercept	tot eff	10.26****	0.687****	290.89***	0.041	0.060
	dir eff	4.20*	0.260	326.22*	0.228	0.121
R - Sq. (corrected)	tot eff	0.1832***	0.1536**	0.3216****	0.2605****	0.0443
	dir eff	0.4250****	0.2655****	0.3031****	0.2787****	2.0465
Sample size		159	159	107	159	158

NOTES: * $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

TABLE 11

REGRESSION ESTIMATES OF EFFECTS FOR FIVE OUTCOMES: INCLUDE ASSESSMENT

Independent Variable		Dependent Variable: Weeks Worked	Empld Wk 13	Earnings Wk 13	Welf Status Wk 13	Ed Status
Entered employment	dir eff	7.38****	0.506****	-52.14	-0.193**	-0.086
Exceeded program C14)	dir eff	3.61	0.178	-142.89	0.131	-0.121
Exceeded 90-day hold C14)	dir eff	0.51	0.208	-97.33	-0.207	0.053
Classroom training	tot eff	-1.77	-0.182	-7.41	0.015	0.076
	dir eff	-1.15	-0.145	-4.99	0.007	0.066
OJT	tot eff	1.59	-0.046	19.93	-0.006	0.008
	dir eff	1.01	-0.071	17.89	-0.004	0.019
Job search	tot eff	0.68	-0.062	29.88	-0.025	-0.027
	dir eff	0.27	-0.077	32.68	-0.032	-0.016
Assessment	tot eff	1.22	-0.144	186.98*	-0.005	-0.004
	dir eff	0.16	-0.207	187.04*	0.015	0.011
Not empld at appl.	tot eff	-0.45	0.051	-66.97	0.001	0.035
	dir eff	-0.08	-0.077	-63.84	-0.011	0.032
HS drop out	tot eff	-0.01	-0.120	-75.22	0.001	0.065
	dir eff	-0.28	-0.149	-73.79	0.023	0.064
Some college	tot eff	-0.56	0.053	-14.79	0.005	0.076
	dir eff	-0.60	0.051	-16.91	0.004	0.077
College graduate	tot eff	1.63	0.099	257.04****	0.032	0.003
	dir eff	1.45	0.090	252.64****	0.035	0.005
AFDC at application	tot eff	-4.12**	-0.253*	-26.43	0.294***	0.032
	dir eff	-4.52***	-0.262*	-36.65	0.286***	0.041
General welfare at application	tot eff	2.17	0.241	-14.48	-0.136	0.254*
	dir eff	1.87	0.237	-16.29	-0.156	0.266*
Single parent, child under 6	tot eff	-0.20	0.063	117.39	0.256	-0.084
	dir eff	0.82	0.132	100.66	0.227	-0.094
Single parent, child 6-17	tot eff	-1.79	-0.069	23.45	0.401***	-0.010
	dir eff	0.11	0.052	16.49	0.350**	-0.031
Parent in 2-parent family	tot eff	1.08	0.121	67.09	0.110	0.024
	dir eff	1.01	0.117	67.19	0.108	0.026
Other family member	tot eff	1.20	0.232	59.13	0.052	-0.024
	dir eff	1.07	0.227	54.53	0.049	-0.021
Gender (1=male)	tot eff	-1.49	-0.081	91.41*	0.079	-0.035
	dir eff	-1.49	-0.087	94.15*	0.085	-0.036
Black	tot eff	-4.40**	-0.508****	-46.89	0.224**	-0.105
	dir eff	-4.05***	-0.485****	-51.70	0.215**	-0.109
Other race	tot eff	0.93	0.174	70.70	-0.071	0.093
	dir eff	0.13	0.120	74.72	-0.052	0.103
Age 30-54	tot eff	0.65	0.007	12.84	-0.070	-0.040
	dir eff	0.75	0.005	15.67	-0.062	-0.044

Table 11 -Continued

Independent Variable		Dependent Variable: Weeks Worked	Empld Wk 13	Earnings Wk 13	Welf Status Wk 13	Ed Status
Age 55 & older	tot eff	0.08	-0.261	63.60	0.049	0.015
	dir eff	0.95	-0.250	71.01	0.087	0.014
Weeks wkd prior to application	tot eff	0.02	0.001	-0.25	-0.003*	0.0003
	dir eff	0.00	0.0004	-0.21	-0.003*	0.001
Labor market experience	tot eff	0.03	0.005	1.04	-0.002	-0.004
	dir eff	0.01	0.004	0.92	-0.002	-0.003
Intercept	tot eff	9.71****	0.752****	187.27*	0.044	0.062
	dir eff	4.14*	0.344	235.58*	0.221	0.117
R - Sq. (corrected)	tot eff	0.1804****	0.1534**	0.3603****	0.2551****	0.0373
	dir eff	0.4207****	0.2767****	0.3426****	0.2826****	0.0395
Sample size		159	159	107	159	158

NOTES: * $p \leq 0.05$
** $p \leq 0.01$
*** $p \leq 0.001$
**** $p \leq 0.0001$

the title IIA report.[2] The entries are regression coefficients. They indicate the difference between adjusted means. For example the coefficient associated with gender in the earnings equation (column 3), gives the difference between the adjusted average male earnings and the adjusted average female earnings. In tables 10 and 11 two entries appear for each independent variable, except the reasons for termination. The first entry was calculated from a regression that excluded reason for termination. These entries estimate total effects for JTP services (d + bc in figure 1). The second entries were taken from regressions which included reason for termination. They contain estimates of direct effects of JTP services (d). There is only one difference between the regressions reported in table 10 and those reported in table 11. Regressions in table 10 omit the JTP service variable called assessment; whereas, regressions reported in table 11 include assessment.

The data in table 10 and table 11 agree on several noteworthy results. First, the primary predictor of earnings is education. College graduates earn substantially more than those with any other level of schooling. Second, the primary predictors of employment (weeks worked and employed during week 13) are race and welfare status at application. The main predictors of welfare status at follow-up are welfare status at application, single parent, and race. Those on welfare at application, single parents, and blacks are more likely to receive public assistance at follow-up than their counterparts, given controls for all the variables in the model. All the independent variables combined do not predict education status to a statistically significant degree.

In table 10 the estimated total effects of the JTP services are anomalous. Those receiving classroom training work fewer weeks, earn less, and are less likely to be employed. The first two of these effects are statistically significant. OJT and job search also have strong negative effects on earnings. Of these two, only the effects of OJT are statistically significant. The negative impact of classroom training on pay is quite large (in absolute value)--$112 per week. Similarly large values are associated with OJT and job search. These effects are so large and unexpected that several additional analyses were undertaken to try to account for them.

First, a complete frequency distribution of earnings was produced to try to identify outliers or other anomalies. The distribution appears in the appendix as table A1. With the

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[2] It should be noted that variables coded 0 and 100 in table 1 were coded 0 and 1 for the regressions. This change in coding changes percentages to proportions. It means that regression coefficients estimates differences of proportions rather than percentages. This inconsistency between the two modes of presentation reflects the nearly universal use of percentages in cross tabulations and proportions in regression analysis.

exception of two zeros, no obvious break points exist above or below which the earnings data appear to be erroneous outliers. The regression analyses were repeated, nevertheless, excluding the two zeros. Additionally, regressions using the logarithm of earnings as the dependent variable were calculated, to reduce the skew of earnings. These variations on the regressions produced only minor changes in the results.

It was decided next to examine the average earnings for every category of JTP services to find out which category or categories contain the high levels of earnings. This examination led to the discovery that those engaging in assessment had extremely high earnings at follow-up (see table 4). When assessment was added as an independent variable in the regressions (table 11), the negative effects of the other services disappeared. The impact of assessment on earnings is quite strong and positive. Those engaging in assessment earn about $187 more per week than those not engaging in assessment (net of the control variables).

There are two reasons why inclusion of assessment in the earnings regression has such a strong impact on the regression coefficients of the other services and why assessment has such a strong effect on earnings. First, assessment is strongly related to earnings, as shown in table 4. Second, assessment is negatively related to the other services. Cross tabulations between assessment and the other three types of services included in the regressions are shown in table 12. Although the phi coefficients (Ø) measuring the correlation in each table are small, the relationships are strong in one sense--being allocated to job search or OJT completely precludes assessment. Engaging in classroom training almost precludes assessment (3 out of 60 cases in classroom training also received assessment).

The strong impacts of assessment and the small sample size suggest that a few earnings outliers among those receiving assessment may be unduly influencing the results. To check this possibility we listed all the earnings for those who received assessment. These values are reproduced in the appendix as table A2. Only 17 out of 29 individuals who received assessment worked during week 13. Of these 17, 7 earned $600 or more in the week. The next highest earnings among the 17 is $450 per week. These results tend to support the conjecture that a few outliers are exercising undue influences on the regressions. It is likely that assessment is an important service for displaced workers, but it is not likely that its effects are close to $200 per week. Additional research using more observations is required before the importance of assessment or other JTP services can be determined with confidence.

As with the title IIA findings, employment at follow-up is improved if one leaves JTP training to enter employment. Referring to table 11 those who entered employment worked nearly 7.4 weeks more than those who left for some reason other than those listed in the table. They worked 3.8 weeks more than those

TABLE 12

BIVARIATE ASSOCIATIONS BETWEEN ASSESSMENT AND THREE OTHER SERVICES--CLASSROOM TRAINING, JOB SEARCH, AND OJT

	Assessment			
Classroom	No	Yes	Total	
No	81.8%	18.2%	100.0% (99)	$\phi = -0.189$
Yes	95.0	5.0	100.0 (60)	$\phi^2 = 0.036$
Total	86.8	13.2	100.0 (159)	$x^2 = 5.66$
				$p < 0.02$
Job Search				
No	83.1	16.9	100.0 (124)	$d = -0.207$
Yes	100.0	0.0	100.0 (35)	$d^2 = 0.043$
Total	86.8	13.2	100.0 (159)	$x^2 = 6.83$
				$p < 0.01$
OJT				
No	79.2	20.8	100.0 (101)	$d = -0.296$
Yes	100.0	0.0	100.0 (58)	$d^2 = 0.087$
Total	86.8	13.2	100.0 (159)	$x^2 = 13.89$
				$p < 0.001$

NOTE: Numbers in parentheses are percentage bases.

who exceeded the program duration, and nearly 6.9 weeks longer than those who exceeded the 90-day hold status (note only 3 cases who "exceeded program duration," however). Those who entered employment also were much more likely (nearly 50 percent) to be working in week 13 than those who did not enter employment. Entered employment also helps to reduce the chance of receiving public assistance in week 13.

It would be useful on several counts to know whether effects for title III respondents differ from those for title IIA respondents. From a policy standpoint, if effects differ, then methods for achieving policy goals must differ. If, for example, classroom training works for title IIA respondents but not for title III respondents, then methods other than classroom training might be needed for title III participants. Also, interpretation of the present data could be carried out with much more confidence than would otherwise be the case if one knew that title IIA and title III effects were the same. The two samples could simply be combined to produce more secure effect estimates than either sample alone could support. Especially for title III respondents, this combined analysis would be advantageous since the title III sample is small.

Although the findings in table 10 and table 11 obviously do not match results for title IIA respondents, it is possible that the differences are due to random sampling error. Table 13 reports statistical tests of the hypotheses that all regression coefficients for each outcome (dependent variable) are the same for title III as they are for title IIA. The findings indicate that, except for earnings, there is a fairly good chance that title III effects are the same as the title IIA effects (probability is greater than 0.05). This result holds irrespective of whether assessment is excluded (top panel of table 13) or included (bottom panel). Thus, with the exception of earnings, it is reasonable to expect that given a sufficiently large sample of title III respondents, findings contained in the companion report on title IIA would be replicated for title III. The earnings equation in the two samples differ substantially, however, as seen informally above and verified in table 13. This result holds even after adding assessment to the regressions.

Hollenbeck and Bennici (1987) recently completed a study of a much larger sample of title III participants than the sample used for the present report. They found that classroom skill training reduced the chance of receiving public assistance, that job search increased the chance of reemployment but decreased the starting wage, and that OJT tends to increase the chance of reemployment and decrease the likelihood of school enrollment. None of these effects is large, however. If one accepts the combined title IIA and title III models for all equations except earnings, then the Hollenbeck and Bennici findings correspond roughly to the findings from the follow-up study reported here and in the title IIA statewide report (Hotchkiss and Smythe 1988). However, we do find positive effects of job search and earnings (not significant);

TABLE 13

TEST OF DIFFERENCES BETWEEN TITLE III AND TITLE IIA MODELS

	Exclude Assessment							
	Exclude Reason for Termination				Include Reason for Termination			
	R - Square				R - Square			
Dependent Variable	Linear	Interaction	F	Prob. Diff.	Linear	Interaction	F	Prob. Diff.
Weeks Worked	0.1815	0.1882	1.62	0.025	0.4009	0.4063	1.50	0.05
Employed Wk 13	0.1461	0.1520	1.36	NS	0.2866	0.2915	1.14	NS
Earnings Wk 13	0.1642	0.2342	10.57	0.0001	0.1768	0.2444	8.66	0.0001
Welfare Status Wk 13	0.3266	0.3307	1.20	NS	0.3769	0.3810	1.08	NS
Education Status	0.0394	0.0430	0.73	NS	0.0498	0.0539	0.71	NS
	Include Assessment							
	Exclude Reason for Termination				Include Reason for Termination			
	R - Square				R - Square			
Dependent Variable	Linear	Interaction	F	Prob. Diff.	Linear	Interaction	F	Prob. Diff.
Weeks Worked	0.1844	0.1905	1.42	NS	0.4020	0.4073	1.42	NS
Employed Wk 13	0.1491	0.1548	1.28	NS	0.2883	0.2935	1.19	NS
Earnings Wk 13	0.1675	0.2387	10.32	0.0001	0.1805	0.2490	8.49	0.0001
Welfare Status Wk 13	0.3285	0.3324	1.11	NS	0.3780	0.3820	1.04	NS
Education Status	0.0395	0.0431	0.69	NS	0.0499	0.0540	0.68	NS

whereas, Hollenbeck and Bennici report a negative effect on wages.

In comparing the current findings to those of Hollenbeck and Bennici it is important to recognize major differences between the two samples. The present data were collected to reflect the first 13 weeks after ending JTP participation, but the Hollenbeck and Bennici sample referenced a time period six months to 18 months following termination of JTP services. Some of the questions (e.g., wage) referred to the first job after ending participation. In contrast, the present sample uses earnings, not wages, during week 13 following termination of services. Given the differences in procedures of the two studies, one would not expect more than rough correspondence of the results.

CHAPTER 4

SUMMARY AND COMMENTARY

This report analyses data from a sample of participants in JTP Ohio under title III of the Joint Partnership Training Act. Throughout the report, findings are compared to results from a companion study of title IIA adult Ohio JTP participants.

As anticipated, title III participants are older, of higher socioeconomic level, more likely to be parents in a two-parent family, and less likely to be exoffenders, LEP, or handicapped than title IIA participants. Title III respondents also earn more and are better educated than title IIA participants.

Five outcomes are examined in the study; these are (1) weeks worked during the 13-week follow-up period after ending JTP services, (2) employment status (working, not working) during week 13 of the follow-up period, (3) earnings during week 13, (4) welfare status during week 13 (received public assistance, did not receive assistance), and (5) education status during the 13-week follow-up (attended school, did not attend school). Relationships between these outcomes and numerous predetermined variables such as race, gender, and labor market experience are examined. However, the primary focus of the study is the effects of JTP training on the outcomes.

Among the predetermined variables, being black has a negative effect on weeks worked and the chance of being employed in week 13. Blacks also are substantially more likely to receive public assistance than whites. The pervasive finding that females earn less than males also is replicated in the title III sample. The effects are fairly large (over $90 a week in table 11) but are only marginally statistically significant due to the large variance of earnings and the small sample size. Receiving AFDC assistance at the the time of application substantially reduces weeks worked, the likelihood of being employed in week 13, and increases the chance of receiving public assistance during week 13 (by about 29 percent). Contrary to past findings and the title IIA results, labor market experience has very little influence on the outcomes. In contrast, education has an extremely strong effect on earnings; college graduates earn over $200 per week more than high school graduates.

The findings regarding JTP services for title III participants differ sharply from the findings in our companion report on title IIA adults. Initially, regressions were carried out including the same primary services used in the title IIA work--classroom training, job search, and OJT. These regressions produced large negative effects of classroom training (-$112 per week total effect), OJT (-$96), and job search (-$76, not significant). Investigation of possible reasons for these anomalous results led to the discovery that omission of the JTP service, assessment,

from the regressions is the primary reason. When assessment was added as an independent variable in the earnings equation, the large negative effects of the other services disappeared, and assessment had a strong positive effect ($187/week). Inclusion or exclusion of assessment in the regressions for the other outcomes had little impact on the results, however.

A note of caution is important regarding the role of assessment in the earnings equation. Only 17 respondents received assessment and worked during week 13 of the follow-up period. Of these 17, 7 had earnings of $600 per week or more. With a total sample size for the earnings equation of 107, these 7 outliers may have had disproportionate influence on the results. Only with additional data can the effects of JTP services and the role of assessment in the earnings equation for title III participants be determined.

The effect estimates of the JTP services on outcomes other than earnings in the title III sample are uniformly small and not statistically significant. Again, much of the reason for these null results may be due to the small number of cases in the title III sample. When a statistical test was conducted to see whether regression coefficients for the title III sample differ from those of the title IIA sample enough so that they are not likely to be due to random sampling error, it was found that the coefficients differ to a statistically significant degree only for the earnings equations. If one extends the findings of the title IIA report to title III participants for the other outcomes, then JTP services do have the intended effects on most of the outcomes (i.e., they improve employment chances and reduce welfare dependency).

Ending JTP participation to enter employment increases weeks worked and the chance of working during week 13 and decreases the likelihood of receiving public income assistance. However, entered employment tends to decrease earnings; though the regression coefficient is not statistically significant, it is fairly large. Since it is possible for JTP programs to influence whether clients end participation to enter employment, the positive effects of entered employment on employment outcomes and welfare status are encouraging. However, if the negative effects of entered employment on earnings are real, as implied by parallel findings reported by Hollenbeck and Bennici (1987), then entered employment is somewhat of a mixed blessing. The optimum balance between taking an early job offer during a job search and holding out for a better job is a complex issue that has no easy answer.

In conclusion, the evidence, on balance, does suggest that assessment is an important aspect of increasing earnings for dislocated workers. The primary avenue for improving other outcomes probability should focus on helping dislocated workers find jobs (enter employment). This emphasis must be tempered by the possibility that early reemployment may reduce earnings. A larger sample and longer tracking of respondents than available here is necessary to assess the influence of JTP on dislocated workers.

APPENDIX

EARNINGS FREQUENCIES

TABLE A1

FREQUENCY DISTRIBUTION OF WEEKLY EARNINGS (Week 13)

Earnings: Dollars/Week	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
0	2	1.2	2	1.2
40	1	0.6	3	1.8
50	1	0.6	4	2.4
55	1	0.6	5	3.0
56	1	0.6	6	3.6
67	2	1.2	8	4.7
68	1	0.6	9	5.3
80	2	1.2	11	6.5
90	1	0.6	12	7.1
96	1	0.6	13	7.7
100	1	0.6	14	8.3
104	1	0.6	15	8.9
105	1	0.6	16	9.5
106	1	0.6	17	10.1
110	1	0.6	18	10.7
125	1	0.6	19	11.2
130	2	1.2	21	12.4
134	2	1.2	23	13.6
140	2	1.2	25	14.8
145	1	0.6	26	15.4
146	1	0.6	27	16.0
148	1	0.6	28	16.6
150	1	0.6	29	17.2
160	4	2.4	33	19.5
163	1	0.6	34	20.1
168	1	0.6	35	20.7
170	2	1.2	37	21.9
175	2	1.2	39	23.1
180	3	1.8	42	24.9
186	1	0.6	43	25.4
191	1	0.6	44	26.0
197	1	0.6	45	26.6
200	7	4.1	52	30.8
209	1	0.6	53	31.4
220	3	1.8	56	33.1
222	1	0.6	57	33.7
224	1	0.6	58	34.3
230	2	1.2	60	35.5
238	1	0.6	61	36.1
240	6	3.6	67	39.6
246	1	0.6	68	40.2
250	5	3.0	73	43.2
260	3	1.8	76	45.0
270	2	1.2	78	46.2
275	1	0.6	79	46.7
279	1	0.6	80	47.3
280	4	2.4	84	49.7
286	1	0.6	85	50.3
291	1	0.6	86	50.9
292	1	0.6	87	51.5
295	1	0.6	88	52.1
300	11	6.5	99	58.6
304	1	0.6	100	59.2
308	1	0.6	101	59.8

Table A1--Continued

Earnings/week Dollars	Frequency	Percent	Cumulative Frequency	Cumulative Percentage
320	5	3.0	106	62.7
324	1	0.6	107	63.3
325	2	1.2	109	64.5
335	1	0.6	110	65.1
340	2	1.2	112	66.3
346	1	0.6	113	66.9
348	1	0.6	114	67.5
349	1	0.6	115	68.0
350	1	0.6	116	68.6
360	3	1.8	119	70.4
365	1	0.6	120	71.0
375	1	0.6	121	71.6
380	1	0.6	122	72.2
394	1	0.6	123	72.8
400	4	2.4	127	75.1
417	1	0.6	128	75.7
426	1	0.6	129	76.3
428	1	0.6	130	76.9
440	2	1.2	132	78.1
450	3	1.8	135	79.9
454	1	0.6	136	80.5
460	1	0.6	137	81.1
464	1	0.6	138	81.7
465	1	0.6	139	82.2
473	1	0.6	140	82.8
480	1	0.6	141	83.4
500	4	2.4	145	85.8
510	1	0.6	146	86.4
516	1	0.6	147	87.0
550	1	0.6	148	87.6
560	1	0.6	149	88.2
569	1	0.6	150	88.8
570	1	0.6	151	89.3
600	4	2.4	155	91.7
663	1	0.6	156	92.3
673	1	0.6	157	92.9
700	2	1.2	159	94.1
738	1	0.6	160	94.7
750	1	0.6	161	95.3
751	1	0.6	162	95.9
769	1	0.6	163	96.4
779	1	0.6	164	97.0
788	1	0.6	165	97.6
790	1	0.6	166	98.2
800	1	0.6	167	98.8
868	1	0.6	168	99.4
900	1	0.6	169	100.0

TABLE A2

LISTING OF WEEKLY EARNINGS (WEEK 13) FOR THOSE ENGAGING IN ASSESSMENT WHO WERE EMPLOYED DURING WEEK 13

Weekly Earnings: Dollars/Week	Cummulative Percentages
145	5.88
250	11.76
260	17.65
340	23.53
350	29.41
365	35.29
380	41.18
426	47.06
428	52.94
450	58.82
600	64.71
663	70.59
769	76.47
779	82.35
788	88.24
868	94.12
900	100.00

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